

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
3 March 2005 (03.03.2005)

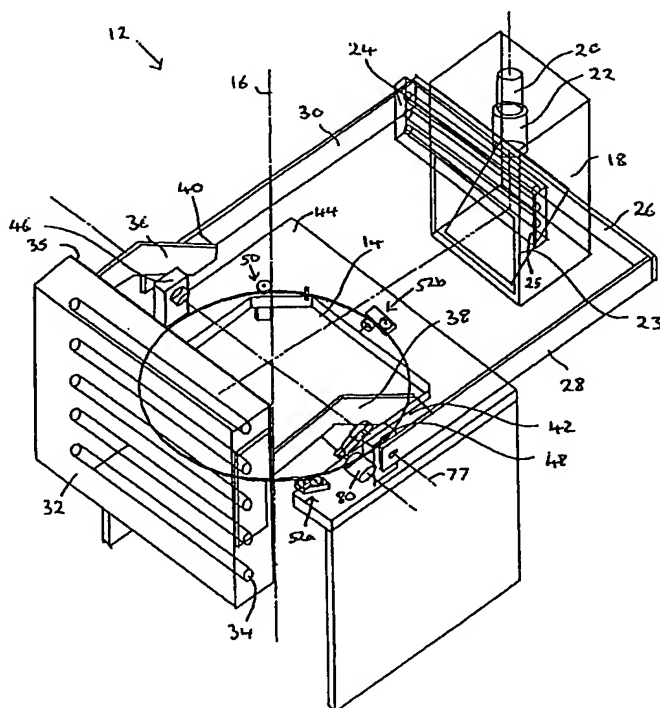
PCT

(10) International Publication Number  
**WO 2005/020144 A1**

- (51) International Patent Classification<sup>7</sup>: **G06T 1/00**
- (21) International Application Number:  
**PCT/GB2004/003581**
- (22) International Filing Date: 20 August 2004 (20.08.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
0319677.1 21 August 2003 (21.08.2003) GB
- (71) Applicants (for all designated States except US):  
**CANON EUROPA, NV** [NL/NL]; Bovenkerkerweg  
59-61, NL-1185 XB Amstelveen (NL). **CANON RE-  
SEARCH CENTRE EUROPE LTD** [GB/GB]; The  
Braccans, London Road, Bracknell, Berkshire RG12 2XH  
(GB).
- (72) Inventors; and  
(75) Inventors/Applicants (for US only): **MATSUMURA,**  
**Koichi** [JP/GB]; 24 Field Park, Warfield, Bracknell, Berk-  
shire RG12 2DZ (GB). **MASUDA, Masamichi** [JP/JP];  
3-5-16, Saiwai-cho, Tachikawa-shi, Tokyo 190-0002  
(JP). **SHIMONISHI, Tatsunori** [JP/JP]; 2-16-2-1017,  
Kokubu-Minami, Ebina-shi, Kanagawa, Tokyo 243-0405  
(JP).
- (74) Agents: **WHITING, Gary et al.**; Abel & Imray, 20 Red  
Lion Street, London WC1R 4PQ (GB).
- (81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,

[Continued on next page]

(54) Title: IMAGE ACQUISITION SYSTEM FOR GENERATION OF THREE-DIMENSIONAL MODELS



(57) Abstract: A photographic apparatus and a method for taking images of an object for use in generating a three dimensional model of the object are described. The apparatus includes an object placement unit, an image capturing unit and an object illumination unit. The image capturing unit and the object illumination unit are connectedly moveable relative to the object placement unit so that in all positions of the image capturing unit and the illumination unit, the object can be placed on the object placement unit so that the illumination unit can provide the illumination required for the image capturing unit to take silhouette images of the object.

WO 2005/020144 A1